

WHAT IS CLAIMED IS:

1. A method for transmitting data comprising:
identifying if data being transmitted is delay sensitive or delay
insensitive;

using packet transmission to transmit delay insensitive data;
and

establishing a wireless communication connection to transmit
delay sensitive data.

2. The method according to claim 1, wherein using packet
transmission comprises using Internet Protocol packet transmission.

3. The method according to claim 1, wherein establishing a
wireless communication connection comprises establishing one of a
wireless circuit switched communication connection, a Personal
Communication System connection, and a radio connection.

4. The method according to claim 1, wherein establishing a
wireless communication connection comprises establishing a wireless
circuit switched communication connection.

5. The method according to claim 4, wherein establishing a
wireless circuit switched communication connection includes
determining call parameters for establishing the wireless circuit
switched communication connection.

6. The method according to claim 5, wherein determining call parameters for establishing the wireless circuit switched communication connection comprises extracting call parameter information from the data being transmitted.

7. The method according to claim 5, wherein determining call parameters for establishing the wireless circuit switched communication connection includes at least one of identifying a call destination and determining a rate of data transmission.

8. The method according to claim 4, further comprising connecting the wireless circuit switched communication connection with a PSTN.

9. The method according to claim 4, further comprising connecting the wireless circuit switched communication connection with the Internet.

10. The method according to claim 9, wherein connecting the wireless circuit switched communication connection with the Internet includes providing a gateway server operatively between a wireless circuit switched communication network and the Internet.

11. The method according to claim 2, wherein using packet transmission to transmit delay insensitive data comprises using packet transmission to send data over the Internet.

12. The method according to claim 11, further comprising connecting the Internet connection to a PSTN.

13. The method according to claim 1, wherein the delay sensitive data includes one or more of voice data, video data, and multimedia data.

14. The method according to claim 1, wherein the data being transmitted is multimedia data comprising a delay sensitive portion and a delay insensitive portion, the delay sensitive portion being transmitted by the wireless communication connection and the delay insensitive portion being transmitted by packet transmission.

15. The method according to claim 1, wherein the data being transmitted is initially packetized, each data packet comprising a header and payload, wherein identifying if the data being transmitted is delay sensitive or delay insensitive comprises:

identifying an application identifier in a respective packet header; and

depending on the application identifier, examining the packet payload.

16. The method according to claim 15, wherein identifying an application identifier comprises determining if the application identifier corresponds to the User Datagram Protocol.

17. The method according to claim 16, comprising examining the data packet payload if the application identifier corresponds to the User Datagram Protocol.

18. The method according to claim 16, wherein examining the data packet payload comprises identifying if the data packet payload contains voice data.

19. The method according to claim 16, wherein examining the data packet payload comprises identifying if the data packet payload contains video data.

20. The method according to claim 16, wherein examining the data packet payload comprises identifying if the data packet payload contains multimedia data.

21. A method for transmitting data between a first node and a second node, comprising:

identifying if data being transmitted is delay sensitive or delay insensitive;

using packet transmission to transmit delay insensitive data; and

establishing a wireless communication connection to transmit delay sensitive data.

22. The method according to claim 21, wherein the first node is a wireless data terminal and the second node is on a PSTN.

23. The method according to claim 22, wherein delay sensitive data is transmitted between the first node and the second node by way of a cellular network.

24. The method according to claim 23, wherein delay insensitive data is transmitted between the first node and the second node by way of the Internet.

25. The method according to claim 21, wherein the first node is a wireless data terminal and the second node is on the Internet.

26. The method according to claim 25, wherein delay insensitive data is transmitted between the first node and the second node by way of a wireless data network.

27. The method according to claim 26, comprising providing a gateway server between the wireless data network and the Internet.

28. The method according to claim 25, wherein delay sensitive data is transmitted between the first node and the second node by way of a cellular network.

29. The method according to claim 28, comprising providing a gateway server between the cellular network and the Internet.

30. The method according to claim 21, wherein the first node is on a PSTN and the second node is a wireless data terminal.

31. The method according to claim 30, wherein delay sensitive data is transmitted from the first node to the second node by way of a cellular network.

32. The method according to claim 21, wherein the first node is on the Internet and the second node is a wireless data terminal.

33. The method according to claim 32, wherein delay sensitive data is transmitted from the first node to the second node by way of a cellular network.

34. The method according to claim 33, comprising providing a gateway server operatively between the Internet and the cellular network.

35. A wireless data terminal comprising:

 a data analyzer for identifying whether data transmitted by the terminal is delay sensitive or delay insensitive;

 a wireless circuit transmission system for transmitting delay sensitive data; and

 a wireless packet transmission system for transmitting delay insensitive data.

36. The terminal according to claim 35, wherein said wireless transmission system is constructed and arranged to establish a wireless circuit switched communication connection.

37. The terminal according to claim 36, wherein said wireless transmission system comprises a computer peripheral card.

38. The terminal according to claim 35, wherein said packet transmission system is constructed and arranged to communicate with a packet data network.

39. The terminal according to claim 38, wherein the packet transmission system is constructed and arranged to communicate with a wireless data network.

40. The terminal according to claim 38, wherein the packet transmission system is constructed and arranged to communicate with the Internet.

41. A data communication network comprising a node on the data communication network constructed and arranged to selectively communicate with a cellular communication network or a wireless data network depending on whether data being sent to or received by the node is delay sensitive or delay insensitive.

42. The network according to claim 41, wherein the node is a wireless data terminal.